



CALIFORNIA
NATIVE PLANT SOCIETY

September 28, 2020

Helene Chalfin
Nursery and Education Director
Jug Handle Creek Farm and Nature Center
jughandle.ed@gmail.com

Dear Helene:

Thank you for reaching out to the Dorothy King Young Chapter (DKY) of the California Native Plant Society (CNPS) in regards to the Caspar community gorse removal project. We are very pleased to learn that the community has received grant funding to tackle removal of this noxious weed!

In answer to your question about whether you should file an appeal to the County of Mendocino's conditional exemption from a Coastal Development Permit for the project, we discussed the issue amongst DKY board members and do not believe that an appeal would be warranted at this time. The conditions established by the County appear reasonable to avoid other impacts that would be associated with ground disturbance and operations during winter months and within nesting season. The following offers a summary of our advice for long-term gorse control, based on our discussions and on our member's long-term experience with gorse control:

1. Gorse (*Ulex europaeus*) resprouts from root fragments, as well as cut stumps, so to be effective, soil disturbance would need to be extensive and focus on removing both the stump and all root material. The reference by UC Davis on Weed Control in the US doesn't recommend disking for mature gorse without herbicide treatment afterward, because of basal crown resprouts (DiTomaso, J. M., Kyser, G. B., Oneto, S. R., Wilson, R. G., Orloff, S. B., Anderson, L. W., ... & Ransom, C. (2013). Weed Control in Natural Areas in the Western United States. Weed Research and Information Center, University of California, 544 pp.). Mechanical removal works for seedlings & juveniles.
2. Soil disturbance also has the potential to cause sedimentation to nearby drainage areas, including wetlands.
3. Decades of gorse control on the State Parks has shown that an integrated weed control methodology, which includes selective application of systemic herbicides on resprouts and seedlings is the only effective way to really eliminate this noxious weed. Cut stump treatments with herbicide, in which small amounts of the chemical are immediately applied after a clean stem cut, can be used, but is time consuming and the herbicide must be applied carefully to achieve desired results. Spot spraying of resprouts and seedlings is effective, but also time consuming. Organic herbicides are not very effective on gorse, as they may burn back top growth, but the woody plants quickly resprout. Any herbicide use must be done by trained and licensed applicators. We certainly recognize that herbicide use is not favored by the local community and that

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chemical application also has its risks. We understand that the County has not been willing to include herbicide use in the exemption, since additional impact analysis would be required for this technique.

4. Removal operations that occur during the winter months, or during nesting season have the potential to cause other impacts to the environment, including native species. For these reasons, we understand why the County is placing restrictions on timing of operations for the exemption.
5. Gorse seed is extremely long-lived in the soil (30 years under optimal conditions). Operations that cause openings for gorse seed germination can be used to help exhaust the seed bank, as long as the seedlings are killed before they are allowed to flower and produce more seed. Grazing or cutting seedlings is only effective if the seedlings are killed and not allowed to resprout.
6. Gorse does not grow as aggressively under a shade canopy, so methodologies that retain or encourage the growth of native woody vegetation (especially native tree species) is desirable where feasible. This means that soil disturbance should avoid impacting the roots of native woody species.
7. In keeping with CNPS goals, the long-term strategy should be to re-establish native vegetation. However, gorse removal and control must be successful in an area before native plants are reintroduced. Otherwise, aggressive follow-up gorse control activities have the potential to impact any natives that may be present.

We really want to thank you again for all of your efforts to control gorse in the Caspar community. You are right that gorse is highly flammable and of great concern for landowners. The grants are an important step forward and we wish to support you and community members in efforts for effective long-term control of this terrible noxious weed. Please don't hesitate to reach out to us again as the project progresses.

Best regards,

Renée Pasquinelli

Renée Pasquinelli
Conservation Co-chair (north)
Dorothy King Young Chapter
California Native Plant Society

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